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PURDUE UNIVERSITY



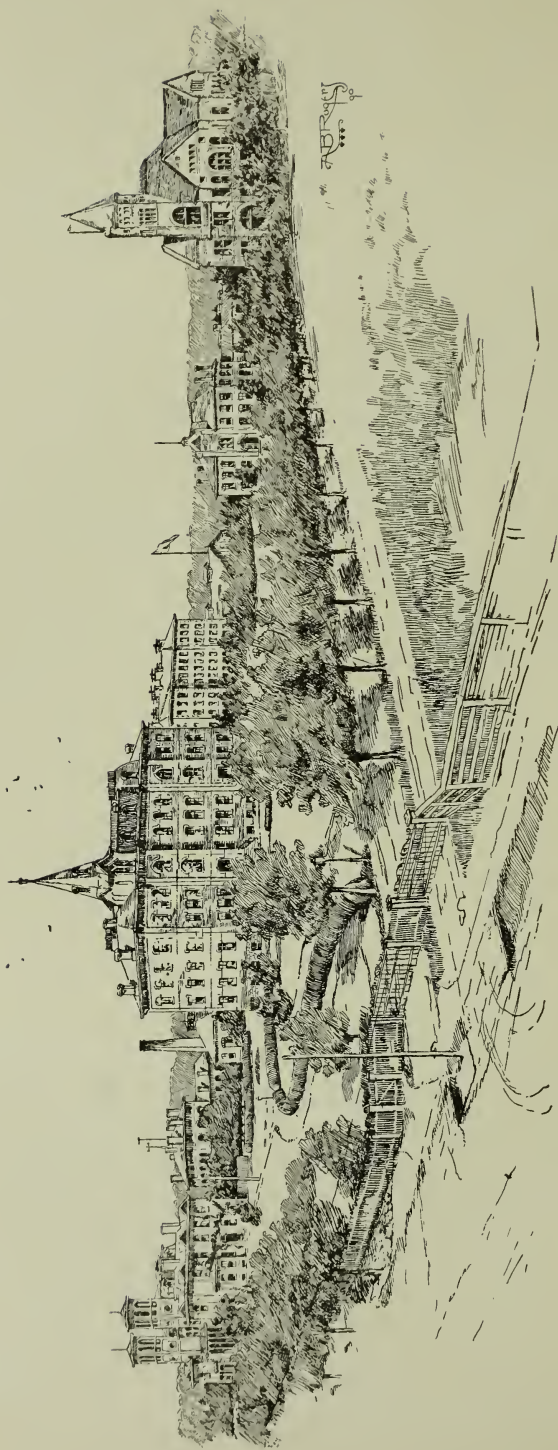
SCHOOL OF PHARMACY



EIGHTH ANNUAL CATALOGUE.

1891-92.

1891-2



PURDUE UNIVERSITY CAMPUS.

- | | | |
|--------------------------------|----------------------------|----------------------------------|
| <p>1. Art Hall.</p> | <p>4. University Hall.</p> | <p>8. Electrical Laboratory.</p> |
| <p>2. Chemical Laboratory.</p> | <p>5. Men's Dormitory.</p> | <p>6. Armory.</p> |
| | | <p>7. Mechanical Laboratory.</p> |

PURDUE UNIVERSITY.



Eighth Annual Catalogue

OF THE

SCHOOL OF PHARMACY

➤ | 1891-92. | ◀



INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.

1891.

TRUSTEES.

CHARLES B. STUART,	-	-	-	-	-	-	LaFayette.
WILLIAM A. BANKS,	-	-	-	-	-	-	LaPorte.
ADDISON BYBEE,	-	-	-	-	-	-	Indianapolis.
WILLIAM H. RAGAN,	-	-	-	-	-	-	Greencastle.
JASPER N. DAVIDSON,	-	-	-	-	-	-	Whitesville.
ULRICH Z. WILEY,	-	-	-	-	-	-	Fowler.

CALENDAR 1891-92.

September 15, 1891. Entrance Examination.

September 16, 1891. Lectures begin in School of Pharmacy.

December 22, 1891, to January 5, 1892. Christmas holidays.

March 16, 1892. Close of session in School of Pharmacy.

FACULTY.

JAMES H. SMART, A. M., LL.D.,

President of the University.

ARTHUR L. GREEN, A. M., PH. C.,

Dean and Professor of Chemistry.

STANLEY COULTER, PH. D.,

Professor of Biology.

GEORGE SPITZER, PH. G.,

Professor of Pharmacy.

GEORGE H. BAERT, PH. C.,

Instructor in Chemistry.

FRANK E. SHATTUCK, PH. G.,

Instructor in Pharmacy.

DAN T. McDOUGAL, B. S.,

Instructor in Botany.

STATE EXAMINERS.

A. J. DETZER, Ft. Wayne.

GEORGE W. SLOAN, Indianapolis.

E. G. EBERHARDT, Indianapolis.

EIGHTH ANNUAL CATALOGUE.

1891-92.

PURDUE UNIVERSITY is the State Institution of Technology. It is supported by legislative appropriations and by the proceeds of an endowment fund granted by the General Government. It derives its name through legislative enactment from John Purdue, who gave to the State for the use of the Institution one hundred and fifty thousand dollars. It has a permanent endowment fund to the amount of three hundred and forty thousand dollars, and other non-productive property in buildings, lands and equipment to the value of four hundred and forty thousand dollars, and an annual income from State appropriations and U. S. Government appropriations.

It has one hundred and eighty acres of land in its campus and farm, fifteen buildings, well-equipped laboratories, shops, museums, library and reading rooms.

The School of Pharmacy affords a thorough and practical training in pharmacy, chemistry and related subjects. Students are engaged seven or eight hours a day at the University. The morning hours are given to microscopical, prescription and cabinet work, together with lectures and recitations. *In addition, students are engaged in chemical and pharmaceutical work in the laboratory from 12:30 to 5:30 five days every week.* This work is done under the personal supervision of instructors. No lectures in the evening, as this time is devoted to study. The work, as thus arranged, allows no opportunity for clerking in a store.

Special attention is called to the large amount of required laboratory work, much more than is usually required in schools of pharmacy. The required laboratory work in the preparation of medicines alone being twenty-five hours a week for seventeen weeks.

Instruction includes two years of twenty-four weeks each. Women are admitted on the same conditions as men.

The instruction as arranged affords also an excellent preparatory course for those who anticipate attending a school of medicine.

OUTLINE OF REQUIRED WORK.

YEAR.	SUBJECTS.	No. of Hours in Lecture Room	No. of Hours in Laboratory.
FIRST.	1. Prescription Work	12	
	2. Qualitative Analysis	45	325
	3. Inorganic Chemistry	69	
	4. Galenical Preparations	32	150
	5. Inorganic Pharmaceutical Preparations	10	125
	6. Pharmacognosy	24	
	7. Therapeutics.	24	
	8. Human Anatomy and Physiology	10	28
	9. Doses and Composition of Medicines	24	
	10. Pharmaceutical Problems.	10	
Total hours for the year		224	664
Average per week		37	
SECOND.	11. Organic Pharmaceutical Preparations	16	200
	12. Toxicology	6	75
	13. Organic Qualitative Analysis	24	
	14. Analysis of Urine	4	50
	15. Quantitative Analysis	16	200
	16. Pharmaceutical Assaying.	6	75
	17. Organic Chemistry	60	
	18. Therapeutics.	24	
	19. Pharmaceutical Synonyms	24	
	20. Botany	24	24
	21. Foods.	12	
	22. Prescription Work	24	96
Total hours for the year		216	744
Average per week		40	

FIRST YEAR.

1. PRESCRIPTION WORK.—Elementary exercises in prescription reading and filling.

2. QUALITATIVE ANALYSIS.—Chemical notation. Rules for the incompatibilities of inorganic substances. Writing of chemical equations. Directions for laboratory work.

In the chemical laboratory each student learns to detect inorganic acids and bases, working with both known and unknown material.

3. INORGANIC CHEMISTRY.—Recitations and lectures on the sources of inorganic drugs, their uses and general practical applications.

4. GALENICAL PREPARATIONS.—Lectures and recitations on the preparation of pills, suppositories, syrups, elixirs, emulsions, fluid extracts, extracts, abstracts, and other galenical preparations. Directions are given for laboratory work.

In laboratory each student, independently, makes 87 preparations; 10 samples of pills, 1 cerate, 2 liniments, 2 glycerites, 2 powders, 3 spirits, 2 mucilages, 2 mixtures, 5 samples of suppositories, 1 infusion, 1 decoction, 1 vinegar, 4 solutions, 1 confection, 1 honey, 4 syrups, 5 elixirs, 4 samples of troches, 3 ointments, 3 tinctures, 3 waters, 8 emulsions, 3 plasters, 6 fluid extracts, 3 soluble fluid extracts, 4 extracts, 1 abstract, 1 mass and 1 oleate. Students who have already acquired special skill in making any of the above kinds of preparation will be provided with other work.

5. INORGANIC PHARMACEUTICAL PREPARATIONS.—Lectures on distillations, sublimation, crystallization and purification of chemicals. Special attention is given to their impurities, pharmaceutical standards and tests. Directions are given for laboratory work.

In the laboratory each student, independently, makes several preparations, among which are light magnesium carbonate,

heavy magnesium carbonate, calcium oxide, red oxide of mercury, yellow oxide of mercury, sulphurated potassa, green iodide of mercury, dried sulphate of iron, potassium iodide, sodium bromide, precipitated sulphur, ammonium iodide, calcium hypophosphite, zinc acetate, potassium citrate, hydrobromic acid, hydriodic acid, sulphurous acid, nitric acid, zinc chloride, potassium hydrate and hydrochloric acid.

6. PHARMACOGNOSY.—Students will examine cabinet specimens of the more common vegetable drugs, being required to recognize them at once by inspection, giving the Latin and English names.

7. THERAPEUTICS.—Recitations on the physiological and therapeutical action of medicines.

8. HUMAN ANATOMY AND PHYSIOLOGY.—The instruction in this subject comprises:

a. A Series of Lectures upon anatomy, with a brief discussion of the functions of the various parts. Frequent quizzes and written tests are given during the course.

b. Laboratory Work, in which the students investigate for themselves the mammalian structure. In this work it is required that the student demonstrate, so far as the time permits, the points given in the lectures.

9. DOSES AND COMPOSITION OF MEDICINES.—Students are thoroughly drilled on the doses, strength and composition of all common medicines.

10. PHARMACEUTICAL PROBLEMS.—A study of the English and metric systems; practical examples in manufacturing chemistry.

SECOND YEAR.

11. ORGANIC PHARMACEUTICAL PREPARATIONS.—Pharmacopœial standards and tests of organic preparations; recitations on laboratory work.

In the laboratory each student, independently, makes several preparations, among which are ethyl acetate, ethyl nitrite, ether, chloroform, alcohol, iodoform, nitrobenzole, anilin, acetanilid, tartaric acid, oleic acid, benzoic acid, gallic acid, one oleate, one oleoresin, resin of podophyllum, an alkaloid (quinine), four scale preparations and a volatile oil.

12. TOXICOLOGY.—Lectures directing laboratory work; students are instructed in the use of antidotes in cases of poisoning.

Laboratory work consists in the separation and identification of the more common organic and inorganic poisons.

13. ORGANIC QUALITATIVE ANALYSIS.—Students will have practice in the chemical identification of several organic compounds, working first with known and finally with unknown mixtures; special attention is given to the incapacities of organic substances.

14. ANALYSIS OF URINE.—The chemical and microscopical examination of samples of urine. Recitations on the pathological indications.

15. QUANTITATIVE CHEMICAL ANALYSIS.—Lectures and laboratory work. Gravimetric determinations. The preparation of volumetric reagents; and their application in testing the strength and purity of commercial and pharmacopœial chemicals.

16. PHARMACEUTICAL ASSAYING.—Lectures and laboratory work; assays are made of opium, cinchona, aconite, belladonna and other drugs.

17. ORGANIC CHEMISTRY.—Recitations and lectures on hydrocarbons, aldehydes, ethers, compound ethers, organic acids, carbohydrates, alkaloids, glucosides, resins, gums, gum-resins, oleo-resins, balsams and oils.

18. THERAPEUTICS.—Continuation of the work of the First Year.

19. PHARMACEUTICAL SYNONYMS.—Students are drilled in the Latin, English and German names of medicinal substances and their preparations.

20. BOTANY.—The instruction in this subject comprises :

a. A careful study of the compound microscope and its appliances, together with practice in mounting, sectioning, etc.

b. A study of the various tissues and tissue elements, together with practice in the application of the facts thus obtained in the detection of adulterations in drugs.

c. A study of the gross anatomy of typical plants and their organs.

21. FOOD.—Lectures on milk, butter, tea, coffee, water, sugar and other foods, including their composition, preparation, adulteration, analysis, preservation and healthfulness.

22. PRESCRIPTION WORK—Each student is required to read and correct hundreds of prescriptions taken from the files of drug stores. The more difficult prescriptions are filled by the student in the prescription room. The reading, correcting and filling is under the personal supervision of the Professor of Pharmacy.

REVIEW EXAMINATIONS.

SECOND YEAR.—Students are required to pass an examination in each of the following subjects of the first year: Doses and Composition of Medicines and Pharmacognosy. The examination in Doses and Composition of Medicines will be required soon after the beginning of the second year.

APPLIANCES.

The University has abundant accommodations in the various laboratories. In the chemical and pharmaceutical laboratory only one student is assigned to a table. The school allows the free use of chemical and pharmaceutical apparatus, of compound microscopes and analytical balances.

All the important pharmaceutical and chemical journals in the English language are kept on file for the use of the student.

Most of the standard works of reference in pharmacy and chemistry are accessible to students, under certain restrictions.

PRESCRIPTION ROOM.

Special attention is called to our prescription department. A separate room is fitted up as a dispensing pharmacy, and used by the students in filling prescriptions. Students are engaged in prescription work one hour a day during the second year. There is also some work required in the first year. It is the purpose to make the School as practical as possible.

MUSEUM.

The School is well supplied with cabinets of crude vegetable drugs, inorganic materials and pharmaceutical preparations. These cabinets are accessible to students at all hours of the day. The student not only examines these samples as a matter of interest, but he is required to recognize them through a series of continued examinations.

REQUIREMENTS FOR ADMISSION.

Candidates for admission must present evidence of good moral character, and have a good knowledge of the common English branches. In arithmetic, special familiarity with denominate numbers, fractions, percentage and proportion will be required. Due weight will also be given to the applicant's penmanship and English composition. Applicants may with profit read Parts I, II and V of Remington's Practice of Pharmacy, yet this is not required for admission. All applicants must be present for examination on Tuesday, September 15, at 9 A. M. No one will be allowed to enter the School of Pharmacy from the other schools of Purdue University without the special permission of the Faculty.

STATE EXAMINATION.

This examination is held during the latter part of the second year, and is conducted by the Committee on Education of the Indiana Pharmaceutical Association.

GRADUATION.

The degree of Graduate in Pharmacy (Ph. G.) will be conferred upon each student not less than twenty-one years of age who successfully completes the required course.

EXPENSES.

The expenses are far less than in the majority of similar schools, while unusual facilities are afforded for laboratory practice. The year is divided into two terms; the first commences September 16, 1890, and the second January 5, 1891.

The fees are as follows, payable in advance :

Entrance fee, per year	\$5 00
Incidentals, per term.....	5 00
Chemicals, per term.....	12 00

No extra fees are required of students who come from other States.

There will also be charges for breakage, and for such chemicals as may be required in unusual quantities. To cover such expenses, a laboratory deposit of \$10.00 is required at the time of admission. About one-half of this deposit is usually returned to the student at the end of the year.

Good board and rooms may be had for \$3.25 per week. The total expense of board, room rent, fuel, fees, books and washing for twenty-four weeks need not exceed \$140. Students of the School of Pharmacy must provide their own rooms in the village of West LaFayette, as they can not be accommodated in the college dormitory.

A fee of five dollars will be required for the diploma, and should be paid to the Secretary before commencement week.

A complete catalogue of Purdue University, containing full information of the various courses, laboratories and museums, will be sent on application. Letters of inquiry may be addressed to the

DEAN OF PURDUE SCHOOL OF PHARMACY,
LaFayette, Ind.

TEXT BOOKS.

The following text books (the latest editions) will be used :

First Year—

Remington's Practice of Pharmacy.
Prescott's First Book in Qualitative Chemistry.
Tidy's Handbook of Modern Chemistry (second edition).

Second Year.

Lyons' Pharmaceutical Assaying.
Sexton's Quantitative Analysis.
Jenning's Practical Urine Testings.
Farquarson's Materia Medica and Therapeutics.

STUDENTS 1890-91.

SECOND YEAR STUDENTS.

JOSEPH H. ANDERSON	Hull, Iowa.
JOSEPH M. BAUER	Newburgh, Ohio.
ISAAC D. BONNETT	Plimpton, Ohio.
ALONZO L. BITTLE	Shawnee Mound.
PAUL D. BROWN	Westfield.
CHARLES C. CRAMPTON	Delphi.
AUGUST DIEHL	LaFayette.
HENRY FLINT	Kendallville.
WILLIAM S. GREEN	Null's Mills.
WILLIAM J. HART	De Forest.
ALVIN L. HILLS	Pittsburg, Texas.
LEMON E. HINE.	Sedan.
JAMES W. KYLE	Romney.
OSCAR V. LAWSON	Chase.
JOSEPH O. McCARTY	Null's Mills.
JOHN S. MAX	LaFayette.
OSCAR A. MEANS	Peru.
GEORGE C. METZGER	LaFayette.
LOUIS W. PLOGSTERTH.	Indianapolis.
FRED P. PYKE	LaFayette.
WILDEY F. REYNOLDS	Richmond.
DAVID L. RIFE	Peru.
HARRY E. SHARRER	Delphi.
JAMES R. SPIVEY	Oxford, Ohio.
FRANK O. STABLER.	Bethany, Ohio.
JULIUS W. STUERMER	Fort Wayne.

Total, 26.

FIRST YEAR STUDENTS.

JOSEPH D. BARTLETT	Sunapee, N. H.
ROBERT M. BATES	LaFayette.
OSCAR N. BENSEN	Hitt, Missouri.
FRANK M. BEST	Liberty.
JOHN BRIGHT	Treaty.
GEORGE W. BULL	Lima.
JOHN F. BURTIS	Mt. Vernon.
ALBERT H. CAULKINS	LaFayette.
ROBERT W. CAMPBELL	Hitt, Missouri.

FRANK CAVENS	Bloomfield.
ROWLAND E. CLARK	Carthage.
GEORGE E. COOK	Anderson.
MISS L. E. CRAMPTON	Delphi.
GEORGE E. CRAVENS	Bloomfield.
CHARLES E. EPPERSON	Palermo, Illinois.
JAMES F. FISK	Chester, N. H.
NATHAN K. GARHARDT	Indianapolis.
LEWIS E. GREEN	Null's Mills.
BENJAMIN F. GRIFFITH	Huntington.
GEORGE M. HALL	Goodland.
MISS N. B. HART	DeForest.
BENJAMIN M. HOAK	Pittsboro.
CHARLES L. HOFFMAN	LaFayette.
CHARLES HOSKINS	Westfield.
FRED. W. JAMISON	LaFayette.
EDWARD KADEL	Terre Haute.
WILLIAM F. KIRKHOFF	LaFayette.
JOHN W. MCMAHAN	Pennville.
MADISON R. MASON	Palermo, Illinois.
JOHN H. MILLER	Vincennes.
CLINTON D. NISBET	Peru.
JOHN C. REDDING	Brookston.
FRANK P. REICHARD	Danville.
EMIL REYER	Indianapolis.
FRED. J. ROSSWURM	Huntington.
GEORGE B. SLOAN	Indianapolis.
FRANK M. THORN	Huntington.
THOMAS A. WEST	Bloomfield.
Total, 38.	

IRREGULAR AND SPECIAL.

EDWARD C. WAGNER	LaFayette.
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SUMMARY.

Second year	38
First year	26
Irregular and Special	1
Total	65

ALUMNI.

1886.

- ERNEST G. EBERHARDT, analytical chemist for Eli Lilly & Co.
MANUEL JAY, practicing physician, 757 South Michigan Street,
South Bend, Ind.
JOHN KENNEDY, in charge of prescription department of R. G.
Moore, Vincennes, Ind.
EDWIN J. MOWRY, druggist, Columbia City, Ind.
LOUIS H. SCHULMEYER, chemist for Daniel Stewart, wholesale
druggist, Indianapolis. Address, 725 N. Tennessee Street.
BERT D. WESTENFELDER, chemist to the American Oak Leather
Co., Cincinnati, O. Address, 247½ Clinton Street.
EMORY J. YEAGER, prescription clerk, with Dr. A. A. Wells, La-
Fayette, Ind.

1887.

- MILLARD CALDWELL, prescription clerk, with B. G. Moore, Hart-
ford City, Ind.
WILLIAM H. DICKINSON, in charge of J. B. Kerr's Lake Street
Pharmacy, 537 West Lake Street, Chicago.
CHARLES L. HACKETT, in the firm of John Hackett & Son, Roan-
oke, Ind.
WILLIAM M. ROSS, with Melendy & Lyman, 241 Nicollet Ave.,
Minneapolis, Minn.
ALBERT W. SHOUP, in firm of Wells & Shoup, West LaFayette,
Ind.

1888.

- PETER H. FETTERS, in firm of Fetters & Morrison, South East
Street, Indianapolis.
SAMUEL KENNEDY, during 1889 with E. Haworth, LaFayette,
Ind. At present attending Indiana Medical College.
GEORGE C. MORRISON, in firm of Fetters & Morrison, Indian-
apolis.
WILLIAM H. VAWTER, manufacturing chemist, with Eli Lilly &
Co., Indianapolis.

1889.

- ADEN L. CAVINS, druggist, Bloomfield, Ind.
 MERIT POST, attending school, Valparaiso, Ind.
 CHARLES W. SHAFER, prescription clerk, with Dr. H. B. Cronk,
 Cincinnati, O. Address, 439 Main Street.
 GEORGE SPITZER, Professor of Pharmacy at Purdue School of
 Pharmacy.
 CORTICE M. WARNER, prescription clerk, with S. Mühl, corner
 Alabama and Seventh Street, Indianapolis.
 DON CARLTON WHITEHEAD, prescription clerk, with C. H. Shad
 & Co., corner Washington and Noble streets, Indianapolis.

1890.

- ROBERT W. ALLEN, in firm of Allen & Allen, Mulberry, Ind.
 ELDEN BEASLEY, druggist, Union, Ind.
 MOSES T. BOGGS, with H. E. Zimmer, 78 E. Washington Street,
 Indianapolis.
 BERT CRITZ, prescription clerk, with S. M. Smith, Osgood, Ind.
 JOHN E. DUNLAVY, prescription clerk at Allen's Drug store,
 Greencastle, Ind.
 WILLIAM E. EASTERDAY, prescription clerk at Some's Pharmacy,
 N. E. corner Sixth and Ohio streets, Terre Haute, Ind.
 JOSEPH L. FEIBLEMAN, with Daniel Stewart, Indianapolis. Ad-
 dress, 226 E. New York Street.
 HENRY H. HARRIS, in H. McFadden's Pharmacy, 120 E. Main
 Street, Danville, Ill.
 GEORGE W. LACEY, with Dr. S. T. Yount, LaFayette, Ind.
 ALVIN H. LEESER, prescription clerk, with Meyer Bros., Ft.
 Wayne, Ind.
 HENRY W. MEINZER, with S. J. Miller, Ft. Wayne, Ind.
 FRANK RIGGS, in firm of Riggs & Plogsterth, Marion, Ind.
 FRANK E. SHATTUCK, Instructor in Pharmacy at Purdue School
 of Pharmacy.
 MARION A. STOUT, prescription clerk, with Eli Foorman, Bluff-
 ton, Ind.
 CHARLES W. WATKINS, with Riggs & Plogsterth, Marion, Ind.
 JOHN M. WESTFALL, manufacturing chemist for Nabers, Mor-
 row & Sinnige, Birmingham, Ala.

LaFayette, Ind.

Dear Sir:

I mail you a copy of our Pharmacy Catalogue. Please compare it with others that you may have. Let me call your attention to some of the main differences between schools of pharmacy:

1. Amount of required laboratory work.
2. Amount of required prescription work.
3. Number of required lectures and recitations.
4. Number of days of work required each week.
5. Expenses.

In these important differences we invite comparison with other schools.

I would be pleased to give any further information regarding our school. Should you wish to apply for entrance, please fill out the blank below and mail it as soon as convenient.

Very truly,

ARTHUR L. GREEN.

1891.

I herewith make application for entrance to PURDUE SCHOOL OF PHARMACY for the year beginning September 16, 1891.

Name of Applicant.





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